

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/986,826	11/13/2001	Shinkichi Ikeda	P21688	6156	
7055	7590 08/29/2005		EXAM	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE			HO, DU	HO, DUC CHI	
RESTON, \			ART UNIT	PAPER NUMBER	
			2665		
			DATE MAILED: 08/29/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Notice of Allowability	Application No.	Applicant(s)				
Notice of Allowability	09/986,826	IKEDA, SHINKICHI				
Notice of Allowability	Examiner	Art Unit				
	Duc C. Ho	2665				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.						
1. This communication is responsive to the application filed 11-13-01.						
2. The allowed claim(s) is/are 1,7, 3, 8, 9, 11-14, 15, 17-19 Renumbered 1-13, respectively.						
3. The drawings filed on 13 November 2001 are accepted by the Examiner.						
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>						
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.						
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.						
<ul> <li>6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>						
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Summary ( Paper No./Mail Date 8), 7. ☑ Examiner's Amendm					

Application/Control Number: 09/986,826 Page 2

Art Unit: 2665

**DETAILED ACTION** 

**ACKNOWLEDGMENT** 

1. The Examiner's Amendment dated 3/28/05 had a typo error of which a change to claim

15-line 11 doesn't exist. This discrepancy is also identified by Applicant in page 10 of Remark

(P21688.A06), which was scanned on 4-22-05.

The Examiner's Amendment below is a copy of previous one without the line [Claim 15,

line 11, "from a" has been changed to ---the data network---.].

**EXAMINER 'S AMENDMENT** 

2. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Joshua Povsner on 03-16-05.

The application has been amended as follows:

In the claims:

Canceling claims 2, 4-6, 10, and 16.

Claim 1, line 9, after "model", next line,

insert --- a propagation state measuring section that measures a radio signal

propagation state in the wireless communications with said mobile terminal apparatus; and

Art Unit: 2665

a transport layer parameter determining section that determines a transmit control parameter value of a transport layer protocol based on the measurement in said propagation state measuring section ---.

Claim 3, line 4, "the Internet" has been changed to --- the data network ---.

Claim 3, line 9, after "model", next line,

insert --- a propagation state measuring section that measures a radio signal propagation state in the wireless communications with said mobile terminal apparatus; and a transport layer parameter determining section that determines a transmit control parameter value of a transport layer protocol based on the measurement in said propagation state measuring section ---.

Claim 8, line 12, after "a type", insert --- of each ---.

Claim 8, line 13, "apparatus" has been changed to --- apparatuses ---.

Claim 8, line 14, before "said", insert --- each ---.

Claim 9, line 8, after "result", next line,

insert --- a header extracting section that extracts a header from the packet received on the data link layer;

a header interpreting section that interprets the header to determine whether or not the header includes an instruction for relaying the packet on the data link layer; and

an output switching section selection that outputs the received packet to said transmitting section on the data link layer when the determined result is indicative of the instruction for relaying the packet on the data link layer ---.

Claim 11, line 1, "10" has been changed to --- 9 ---.

Application/Control Number: 09/986,826 Page 4

Art Unit: 2665

Claim 12, line 1, "10" has been changed to --- 9 ---.

Claim 13, line 1, "10" has been changed to --- 9 ---.

Claim 15, line 6, after "signal", next line,

insert --- a detecting section which detects that a type of data of payload of a packet to transmit is data of the transport layer,

wherein said header generating section adds the detected result to the header as information on the type of the data of the payload ---.

## Reason for Allowance

3. Regarding claims 1, and 7, the prior art fails to teach or suggest a base station apparatus that performs wireless communications with a mobile terminal apparatus, while relaying the connection between the terminal apparatus and the Internet, the base station comprises a transport layer parameter determining section that determines a transmit control parameter value of a transport layer protocol based on the measurement in the propagation state measuring section, in combination with other limitations, as specified in the independent claim 1.

Regarding claim 3, the prior art fails to teach or suggest a mobile apparatus that performs wireless communications with a base station apparatus, while relaying the connection between the base station apparatus and a network, the mobile apparatus comprises transport layer parameter determining section that determines a transmit control parameter value of a transport layer protocol based on the measurement in the propagation state measuring section, in combination with other limitations.

Application/Control Number: 09/986,826 Page 5

Art Unit: 2665

Regarding claim 8, the prior art fails to teach or suggest a wireless access system including a base station apparatus that comprises a processing selecting section that selects either the first protocol relay section or the second protocol relay section corresponding to a type of each of said mobile terminal apparatuses to instruct the processing for each said mobile terminal apparatus, in combination with other limitations.

Regarding claims 9, and 11-14, the prior art fails to teach or suggest a base station apparatus, that comprises an output switching section that outputs the received packet to the transmitting section on the data link layer when the determined result is indicative of the instruction for relaying the packet on the data link layer, in combination with other limitations, as specified in the independent claim 9.

Regarding claims 15, and 17-18, the prior art fails to teach or suggest a communication terminal apparatus that comprises a header generating section, wherein the header generating section adds the detected result to the header as information on the type of the data of the payload, in combination with other limitations, as specified in the independent claim 15.

Regarding claim 19, the prior art fails to teach or suggest a communication method, the method comprises a step adding to a header an instruction, and when the header has the instruction for relaying the packet on the data link layer, composing a protocol service data unit from the packet, and relaying the composed protocol service unit on the data link layer to transmit to a cable network layer, in combination with other limitations.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Suchuto-

Duc Ho

08-23-05